REMARKS

STATUS OF THE CLAIMS

Claims 7-18, 31-44 are pending.

Claims 7-18, 31-44 were rejected under 35USC.

By this response, please **amend claims 7, 9, 13, 35.**

Rejected Claims

Claims 7-18, 31-44 were rejected under 35USC112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention.

Regarding claim 7, the Examiner stated that it is unclear how the first channel and the second channel for the node are based on a number.

Amended claim 7 includes the following features:

the node determining a number of hops between the node and a server of the mesh network;

assigning a first channel to an uplink for the node;

assigning a second channel for a downlink for the node;

maintaining the first channel and the second channel distinct from an uplink channel of an upstream node;

wherein the assignment of first channel and the second channel for the node is based on the number of hops between the node to the server.

Amended claim 7 more clearly describes that the assignment of the first channel and the second channel is based on the number of hop between the node and a server of the mesh network.

Support for the amendments can be found throughout the specification. Specifically, on page 12, the specification states "The present invention also incorporates a protocol for assigning channels to individual links in a multi-hop mesh network topology as illustrated in Figure 8. There exist routing protocols that allow each node in the wireless network to learn the number of hops to a *distinguished node in the network (the "Server")*. An example of such a routing protocol is disclosed Application Serial No. 09/751,262, filed December 29, 2000, entitled "Method And System To Provide A Routing Protocol For Wireless Devices. The information regarding the number of hops from any client to the server is used in the present application to determine channel allocations."

Additionally, on pages 13 and 14, the specification provides an exemplary embodiment of how the downlink and uplink channels can be assigned based on the hop count. More specifically, the specification states "At block 940, the number of hops to the server, through the default gateway is determined. For one embodiment, this data is carried within the routing packet. For another embodiment, a further packet may carry this information. The number of hops is designated as N.

At block 950, the channel for a first interface is set to (N (mod X)+1), where N is the number of hops to the server, and X is the number of available channels, which is at least three. By using a minimum of three channels, interference upstream and downstream is avoided. This is discussed in more detail below. However, if more than three channels are available, the system may utilize any number of channels.

At block 960, the channel for the second interface is set to ((N+1) (mod X)+1). This makes certain that the two interfaces have different channels. The process then ends at block 970."

Regarding claim 9, the Examiner stated it is unclear how the number of hops is determined from information carried in the routing packets.

Claim 9 has been amended to more clearly state that the number of hops is determined from routing information carried in routing packets.

Regarding claim 10 and 11, the Examiner stated that it is unclear what is the routing information. Claim 9 has been amended to make it clear that the routing information is the routing information of claim 9.